

A Warning Cork for a Poison Bottle.

R. Watson Councill (*Monthly Magazine of Pharmacy*), proposes that the cork for a poison bottle be cut in two, horizontally, near the small end, and the entire cork threaded on a string, with a knot below the lower segment of the cork. The free end of the string is to be attached to an additional label bearing the word poison. The cork being fitted to the bottle containing poison there are several things which attract attention, even in the dark. First, the string; second, the label (bearing the word poison); if these are not noticed, then if the cork is seized and pulled, only the upper segment comes away, sliding on the string, and the contents of the bottle cannot be poured out. It is necessary to pull on the string itself in order to remove the cork entire. This appliance can be made by any one, costs nothing, and suits any bottle. On the bottle itself the poison label should always be stuck above the directions, so as to be seen first, as, when the poison label is placed at the bottom of the bottle it is often covered by the hand grasping the bottle and is not seen.

Tablet Triturates.

By C. S. HALLBERG.

None of the various novelties in pharmaceutical science has leaped into favor as quickly as have the tablet triturates. Although brought into notice by Dr. Fuller, of New York, some ten years ago, it is only during the past three years that they have been exploited by manufacturers. The success that they have met with is tremendous, and if their employment should continue in the same ratio it will seriously threaten dispensing pharmacy. Of the various forms in which medicines have been presented, from the elixir to the coated and compressed pills and lozenges, the tablet triturate is by far the most insidious. There is no fear, however, that the triturates have come to stay, but, on the other hand, a probability that they will disappear as quickly as they came. They owe their popularity to the fact that dry medication is favored by many physicians; to the claims set forth as to their ready solubility; and, above all, to the fact that the triturates have enabled the physicians to supply small doses in an elegant and convenient form at a very small cost to his patients, thus affording him an advantage homeopaths have so long enjoyed.

These apparent advantages will not stand the searchlight of investigation. Dry medication, except for specific purposes or local effect, or in the case of a few exceptional remedies, is the most unsatisfactory method of administration of medicine.

Therapeutic effect is largely a question of solubility in the system. As a general rule the more dilute the drug the quicker and more certain the effect. The effect is quicker for the same quantity of drug

from an infusion than from a tincture; and in the same ratio more prompt is the effect from a tincture than a fluid extract, just as the effect is greater from a fluid extract than from an extract, and from an extract than from a resin such as podophyllin.

But this is not the only advantage that liquid medicants have over dry or powdered forms. Many substances do not act when taken internally because reaction of the fluids of the body is not favorable to their solution and consequent absorption. Thus oxides, carbonates, alkalis, etc., are not active if the fluids be alkaline, while the effects of other substances, such as chloroform, are impaired through the effect of an acid condition of the fluids. The liquid form of medicine permits addition of acids and alkalis to correct the respective conditions and to insure the prompt effect of the remedy. Addition of acids to tonic bitters is a familiar practice. In this way an effect far more prompt is obtained than in neutral media.

The so-called idiosyncrasies, toward or untoward effects, of many drugs are probably due to the fact that they are not properly dissolved or absorbed by the system, and aside from the reaction of the liquids, may also be due to the inactivity of excretory organs, such as the kidneys. The cumulative effects of drugs, as in the case of strychnine, are undoubtedly due to the comparative insolubility of the alkaloid or its salts in the alkaline fluids; when the reaction changes to acid, then the strychnine which may have accumulated in the system is quickly dissolved, with not infrequently the most dangerous consequences. As an illustration in one instance, a person for whom strychnine tablet triturates (1.50 grain) had been prescribed, obtained a bottle of 500 and afterwards a second bottle, of which he complained after due use that it had no effect. These triturates in all probability contained strychnine; hence it is likely that it remained insoluble in the system.

Another reason why organic drugs are not adapted to dry medication, especially in tablet triturate form, is that these latter are made from alkaloids, and not from preparations of the drug. If the prompt certain effects of a drug be required, in solution, is of much greater importance than when the full effect is desired the drug (in most instances) be used and not an alkaloid nor other active principle. Notwithstanding claims made, for commercial reasons, the opinion that alkaloidal drugs are valuable only because of the amount of alkaloids they may be shown to contain, has not been sufficiently demonstrated to be incorporated in the United States Pharmacopœia of 1890 to any greater extent than in the United States Pharmacopœia of 1880, except as to one drug, nux vomica. The dose of extract of nux vomica is given by a standard authority (National Dispensatory) at one-half grain, "which may be gradually increased to gram 0.1 or 0.2,

when the specific effect of the drug is sought."

Based upon these doses of the extract the equivalent quantities of the other preparations are presented (in tabular form), and also the amount of alkaloids and strychnine in each.

Extract	Fluid	Extract	Tincture		Alkaloids		Strychnine.	
			c. c.	min.	mg.	gr.	mg.	gr.
0.03 gm.	0.3 c. c.	5 Min.	1.5 c. c.	25 min.	4.5 mg.	1.15 gr.	2.25 mg.	1.30 gr.
0.06	0.6	10	3.0	50	9.0	⅞	4.50	1.15
0.10	1.0	16	5.0	80	18.0	⅝	9.00	⅞
0.20	2.0	32	10.0	160	27.0	⅜	13.50	3.16

This table demonstrates that the weakest preparation (the tincture) is relatively the strongest compared with the drug strength of the fluid extract, the extract, or the alkaloids. That the full effect of nux vomica is represented by the alkaloids is no more true than that the effects of opium are represented by morphine, or that cinchona is completely represented by the alkaloids. Medical men should begin to realize more generally these conclusions:

(1) That when full, prompt effects of any drug is desired it must be prescribed in the form of a tincture made from the crude drug of the best quality, and not from the fluid extract. (2) That alkaloids cannot replace their respective drugs any more than synthetic products have displaced the alkaloids. (3) That by using tablet triturates they are simply popularizing the form of self-medication, the triturates now being put up and numbered according to the disorder for which they are recommended. (4) That old-time patent medicine, herb women, and Indian and Chinese travelling fakirs are preferred by many persons to modern physicians because the former give them "good, old reliable medicines," that "work promptly and effectively," instead of dimethyl-phenyl-isopyrazolon, acetphenetid, and the hosts that have come and gone.

The quicker physicians appreciate that the materia medica and pharmacy of their